

In the Claims:

Please amend the Claims as follows:

- 1 (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)

8. (Amended) A method of manufacturing a A piezoelectric actuator,
~~manufacturing method for generating which generates~~ pressure in each said
pressure chamber of ~~the~~ a pressure chamber forming unit on which pressure
chambers formed of multiple concave parts are provided on one surface,
comprising:

~~the~~ a first process for forming ~~the~~ a first sheet formed of pliant piezoelectric
materials and ~~the~~ a second sheet formed of pliant predetermined materials, forming
~~the~~ an upper electrode layer formed of conduction materials on one surface of said
first sheet, and forming ~~the~~ a lower electrode layer formed of conduction materials
on the other surface of said first sheet or one surface of said second sheet,
wherein piezoelectric material is used as said material of the second sheet and
electrode layer for polarization formed of conduction material is formed on the
other surface side of said second sheet;

~~the~~ a second process for piling and densifying said first and ~~the~~ second
sheets having said lower electrode layer between;

~~the~~ a third process for polarizing said first sheet in ~~the~~ a direction of ~~it's~~ a
thickness of the first sheet; and

~~the~~ a fourth process for patterning said upper electrode layer in order to form multiple electrodes corresponding respectively to each said pressure chamber of said pressure chamber forming unit, wherein by placing a voltage between said upper electrode layer and said electrode layer for polarization, said first sheet is polarized in the direction of its thickness.

9. (Amended) A method of manufacturing a A piezoelectric actuator
~~manufacturing method~~ as defined in Claim 8, characterized by:

in the second process;

~~the~~ a pliant third sheet, ~~in which~~ having openings with ~~the~~ a predetermined size and shape ~~are provided~~, is piled on one surface side of said first sheet or the other surface side of the second sheet, and said third sheet is densified together with said first and the second sheets.

10. (Amended) A method of manufacturing a A piezoelectric actuator
~~manufacturing method~~ as defined in Claim 8, characterized by:

in said fourth process;

one surface side of said first sheet is ~~conducted the patterning~~ patterned together with said upper electrode layer so that ~~it~~ the first sheet will be separated corresponding respectively to each said pressure chamber of said pressure chamber forming unit.

11. (Canceled)

12. (Amended) A method of manufacturing a A piezoelectric actuator
~~manufacturing method~~ as defined in Claim 8, characterized by:

in said first process;

ceramic materials ~~will be~~ are used as said material of the second sheet.

13. (Amended) A method of manufacturing a ~~An~~ piezoelectric actuator
~~manufacturing method~~ as defined in Claim 8, characterized by:

in said first process;

said lower electrode layer is formed thicker than said upper electrode layer;


and

the other surface side of said lower electrode layer ~~will be given the function~~
~~as the is a vibrating means vibrator for generating said~~ that generates pressure for
ejecting said ink in said pressure chamber.

The Commissioner is hereby authorized to charge any fees (or credit any overpayment) associated with this communication and which may be required under 37 CFR §1.78 to Deposit Account No. 50-2603, **referencing Attorney Docket No. 353700.00112. A duplicate sheet is attached.**

Dated: October 26, 2004

Respectfully submitted,
REED SMITH LLP

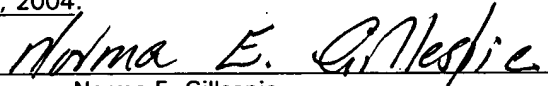
By: 
Name: Doyle B. Johnson
Registration No. 39,240
Attorneys for Applicant

P.O. Box 7936
San Francisco, CA 94120
Direct Dial (415) 659-5969
(415) 543-8700
(415)391-8269 fax

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, US Patent & Trademark Office, P.O. Box 1450 Alexandria, VA 22313 on October 26, 2004.

Dated: October 26, 2004


Norma E. Gillespie